WHAT IS CLAIMED IS:

1. A lockup device configured to lock up a fluid-type torque transmission device comprising:

a front cover;

a piston being axially movable relative to said front cover;

a clutch mechanism having a friction coupling part being pressed against said front cover by said piston; and

a piston coupling mechanism comprising,

a piston support member being fixed to said front cover to support said piston, and

a coupling member being disposed axially between said front cover and said piston, said coupling member being having a first fixing part being axially interposed between said front cover and said piston support member, and a second fixing part being fixed to said piston, said second fixing part being elastically deformable in an axial direction.

2. The lock up device according to claim 1, wherein

either said front cover or said piston support member has an engaging part that is engagable with said first fixing part such that said coupling member cannot rotate relative to said front cover and said piston support member.

3. The lock up device according to claim 2, wherein

said coupling member is an annular plate being elastically deformable in an axial direction and said first and second fixing parts are both plural in number and arranged along a rotational direction.

4. The lock up device according to claim 2, wherein

said engaging part is a protruding part that projects in an axial direction, and either said front cover or said piston support member not having said engaging part has a recessed part into which said tip end of said protruding part is configured to be inserted.

5. The lock up device according to claim 2, wherein said first fixing part is arranged at a different radial position from said second fixing part.

6. The piston coupling mechanism according to claim 2, wherein said piston support member has a limiting part that limits the range of axial movement of said piston.

7. The lock up device according to claim 1, wherein said first fixing part is arranged at a different radial position from said second fixing part.

8. The piston coupling mechanism according to claim 1, wherein said piston support member has a limiting part that limits the range of axial movement of said piston.

9. A fluid-type torque transmission device comprising:

a front cover having a friction surface;

an impeller being fixed to said front cover and forming a fluid chamber configured to be filled with an operating fluid;

a turbine being arranged within said fluid chamber so as to face axially said impeller; and

a lockup device comprsing,

a clutch mechanism having a friction coupling part being configured to be pressed against said friction surface,

an elastic coupling mechanism being configured to couple elastically said clutch mechanism and said turbine,

a piston being axially disposed between said front cover and said turbine and configured to press said friction coupling part against said friction surface, said piston being axially movable relative to said front cover,

a piston coupling mechanism having an annular coupling member disposed axially between said front cover and said piston, said piston coupling mechanism being configured to couple non-rotatably said piston and said front cover, said coupling member having an annular part being fixed to either said piston or said front cover, and

a plurality of elastic parts being formed on either a radially outward facing edge or a radially inward facing edge of said annular part, said plurality of elastic parts being fixed to either said front cover or said piston not being fixed to said annular part, said plurality of elastic parts being configured to deform elastically in the axial direction.

10. The fluid-type torque transmission device according to claim 9, wherein

each of said elastic parts has a first portion that extends away from a radially facing edge of said annular part in a direction of separation from said annular part,

and a second portion that extends to one side in a rotational direction from an end part of said first portion that is farther from said annular part.

11. The fluid-type torque transmission device according to claim 10, wherein

a piston support member that supports said piston such that said piston is movable in the axial direction is provided on a turbine side of said front cover, and

said annular part is fixed to be interposed axially between said front cover and said piston support member.

12. The fluid-type torque transmission device according to claim 9, wherein

a piston support member that supports said piston such that said piston is movable in the axial direction is provided on a turbine side of said front cover, and

said annular part is fixed to be interposed axially between said front cover and said piston support member.

13. An elastic coupling mechanism configured to transmit torque and also to absorb and damp torsional vibrations, said elastic coupling mechanism comprising:

a plurality of springs being arranged along a rotational direction and being configured to deform elastically in the rotational direction, said plurality of springs being movable in the rotational direction;

a first rotary member being configured to support said plurality of springs, said first rotary member having a first axial support part being configured to support one axially facing side of said plurality of springs, and a first radially outside support

part being configured to support a radially outward facing side of said plurality of springs;

a second rotary member being fixed to said first rotary member, said second rotary member having a plurality of second rotational direction support parts being disposed rotationally between said plurality of springs, said second rotary member being configured to support rotationally facing ends of plurality of springs; and

a third rotary member being provided to be relatively rotatable to said first and second rotary members, said third rotary member having a plurality of third rotational direction support parts being configured to support rotationally facing ends of said plurality of springs,

said first and second rotary members being configured to support a radially inward facing side of said plurality of springs and an axially opposite facing side of said plurality of springs, and

said first axial support part having a plurality of positioning holes being formed in rotational positions corresponding to said second rotational direction support parts and having rotational direction lengths larger than rotational direction widths of said second rotational direction support parts.

14. A method of installing a plurality of springs into prescribed positions in an elastic coupling mechanism configured to both transmit torque and absorb and damp torsional vibrations through a plurality of springs arranged along a rotational direction, the spring installation method comprising:

preparing a rotary member comprising preparing a plurality of rotary members, said plurality of rotary members including,

a first rotary member being configured to support the plurality of springs, the spring being movable in the rotational direction, said first rotary member having a first axial support part configured to support one axially facing side of the plurality of springs and a first radially outside support part configured to support a radially outward facing side of the plurality of springs, and

a second rotary member being fixed to said first rotary member and having a plurality of second rotational direction support parts being disposed rotationally between the plurality of springs and supporting rotationally facing ends of the plurality of springs;

forming a plurality of positioning holes having rotational direction lengths being larger than rotational direction widths of said second rotational direction support parts, said positioning holes being formed in said first axial support part at rotational positions corresponding to said second rotational direction support parts;

preparing a spring installation tool having a plurality of protruding parts being configured to be inserted into said positioning holes;

inserting said protruding parts into said positioning holes;

arranging the plurality of springs rotationally between said positioning holes of said first rotary member;

removing said protruding parts from said positioning holes of said first rotary member and arranging said second rotational direction support parts of the second rotary member to correspond to the rotational positions of said positioning holes; and

fixing said first rotary member and said second rotary member are fixed together.

15. A fluid-type torque transmission device comprising:

a front cover having a friction surface;

an impeller being fixed to said front cover and forming a fluid chamber to be filled with an operating fluid;

a turbine being arranged within said fluid chamber to face axially said impeller, and

a lockup device comprising,

a plurality of springs being arranged along a rotational direction between said piston and said turbine, said plurality of springs being configured to deform elastically in the rotational direction, said plurality of springs being movable in the rotational direction,

a first rotary member being disposed on a turbine side of said plurality of springs, said first rotary member being configured to support said plurality of springs, said first rotary member having a first axial support part and supporting a turbine side of the springs, and a first radially outside support part being configure to support a radially outward facing side of the springs,

a second rotary member that is fixed to the first rotary member and the turbine and has a plurality of second rotational direction support parts that are disposed rotationally between the springs and support a rotationally facing ends of the springs,

a third rotary member being provided to be rotatable relative to said first and second rotary members, said third rotary member having a friction coupling part axially facing said friction surface and a plurality of third rotational direction support parts being configured to support said rotationally facing ends of said plurality of springs, and

a piston being disposed on a turbine side of said friction coupling part, said piston being configured to couple non-rotatably and axially movable to said front cover, said piston being configured to press said friction coupling part against said friction surface,

said first and second rotary members being configured to support the radially inward facing side of said plurality of springs and a front cover side of the springs when coupled, and

said first axial support part having a plurality of positioning holes being formed in rotational positions corresponding to said second rotational direction support parts and having rotational direction lengths being larger than rotational direction widths of said second rotational direction support parts.

16. The fluid-type torque transmission device according to claim 15, wherein

said third rotational direction support parts extend toward said turbine from a radially outward facing edge of the friction coupling part, and

said positioning holes are arranged such that at least a portion thereof is positioned more radially inward than the radial position of said third rotational direction support parts.

17. The fluid-type torque transmission device according to claim 16, wherein

said first rotary member has a communication hole formed in a position more radially inward than the radial position of said third rotational direction support parts.

18. The fluid-type torque transmission device according to claim 16, wherein

said third rotational direction support parts engage with said second rotary member in such that they cannot move in the radial direction.

19. The fluid-type torque transmission device according to claim 15, wherein

said first rotary member has a communication hole formed in a position more radially inward than the radial position of said third rotational direction support parts.

20. The fluid-type torque transmission device according to claim 15, wherein

said third rotational direction support parts engage with said second rotary member in such that they cannot move in the radial direction.

21. A method for assembling a piston coupling mechanism of fluid-type torque transmission device comprising:

fixing a return plate to a piston on a first side of said piston;

attaching said return plate and said piston to a piston pilot on a first side of said piston pilot;

attaching said return plate, said piston, and said piston pilot to a front cover on a first side of said return plate and said first sides of said piston and said piston pilot axially interposing said return plate between said front cover and said piston pilot.

22. The method for assembling a piston coupling mechanism of fluid-type torque transmission device according to claim 21, further comprising,

inserting axially protruding parts of said piston pilot through fixing holes of said return plate to attach said return plate to said piston pilot.

23. The method for assembling a piston coupling mechanism of fluid-type torque transmission device according to claim 22, further comprising,

inserting said axially protruding parts of said piston pilot inside recessed parts of said front cover, said piston pilot being non-rotatably attached to said front cover.

24. The method for assembling a piston coupling mechanism of fluid-type torque transmission device according to claim 23, further comprising,

arranging said piston pilot radially outside and on a center boss of said front cover.

25. The method for assembling a piston coupling mechanism of fluid-type torque transmission device according to claim 24, further comprising,

welding an axial protuberance of said piston pilot to said front cover.

26. The method for assembling a piston coupling mechanism of fluid-type torque transmission device according to claim 21, further comprising,

inserting said axially protruding parts of said piston pilot inside recessed parts of said front cover, said piston pilot being non-rotatably attached to said front cover.

27. The method for assembling a piston coupling mechanism of fluid-type torque transmission device according to claim 21, further comprising,

arranging said piston pilot radially outside and on a center boss of said front cover.

28. The method for assembling a piston coupling mechanism of fluid-type torque transmission device according to claim 21, further comprising,

welding an axial protuberance of said piston pilot to said front cover.

29. The method for assembling a piston coupling mechanism of fluid-type torque transmission device according to claim 21, further comprising,

utilizing rivets to fix said return plate to said piston.

30. The method for assembling a piston coupling mechanism of fluid-type torque transmission device according to claim 21, further comprising,

utilizing a pin and a sleeve to fix said return plate to said piston.